

Supplementary material-ReStGAN: A step towards visually guided shopper experience via text-to-image synthesis

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1. Additional Results

Additional 10 sequences generated by ReStGAN with multiple jitters of noise are shown in Fig.1–3. ReStGAN is able to capture intricate stylistic details in apparel like tears in jeans (S.7), wide leg (S.4) and texture of materials like fleece (S.3). It is also able to generate multiple apparel styles that match an attribute. In S.6, conditioning on “Stretch pants” generates scrubs and yoga pants both of which match the attribute “Stretch”. In the proposed colour modelling, textual colour attribute is converted into a cluster and fed into ReStGAN. This leads to image generations with colours close to the input cluster. In row 2 of Fig.5, conditioning on “orange” results in a peachy colour which is visually close to orange. We plan to mitigate this in future iterations by modelling colour as a continuous space. While attributes like “skinny”, are visually prominent and observable in S.1, “Slim” in S.2 is visually subtle in the generated image. Twenty seven additional sequences generated by ReStGAN are showcased in Fig.4–7.

*Work done at Amazon

S.1 “Purple women’s pants” “leggings”



S.2 “Black men’s pants” “Sweatpant” “Slim”



S.3 “Green men’s pants” “Fleece pants”



Figure 1. Sequence S.1-S3 generated by ReStGAN.

S.4 “Navy women’s pants” “Wide leg”



S.5 “Midnight blue women’s jeans” “Skinny leg”



S.6 “Navy women’s pants” “Stretch pants” “Scrub pants”



Figure 2. Sequence S.4-S.6 generated by ReStGAN.



Figure 3. Sequence S.7-S.10 generated by ReStGAN.



Figure 4. Additional Results Set 1 generated by ReStGAN.

“Navy blue men’s pants” “Tapered”

“Slim”

“Plaid”

“Khaki”



“Indigo women’s pants” “Jogger pants”

“Dark Blue women’s jeans” “Mid rise”

“Boot cut”



“Orange women’s jeans” “Ankle jeans”



“Blue men’s jeans”

“Slim fit”

“Steel Blue men’s jeans” “Slim leg”

“Vintage”



“Blue women’s jeans” “High waist” “Destroyed denim”

“Stretch”

“Skinny”



Figure 5. Additional Results Set 2 generated by ReStGAN.

“Khaki men’s jeans”



“Loose fit”



“Cargo”



“Black men’s pants”



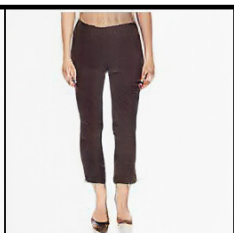
“Trackpant”



“Sienna women’s pants”



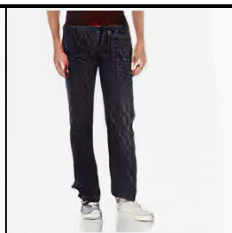
“Slim”



“Black men’s jeans”



“Standard straight leg”



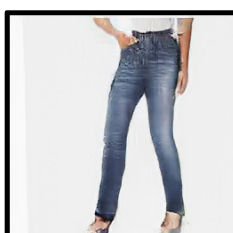
“White men’s pants”



“Compression”



“Indigo women’s pants”



“Capri jeans”



“Dark green men’s jeans”



“Relaxed”



“Bootcut”



“Indigo men’s jeans”



“Regular denim”



Figure 6. Additional Results Set 3 generated by ReStGAN.

“Indigo men’s jeans” “Relaxed fit”



“Green women’s pants” “Leggings”



“Navy men’s shorts” “Large shorts” “Bermuda”



“Olive men’s shorts” “Sweatpants” “fleece pants”

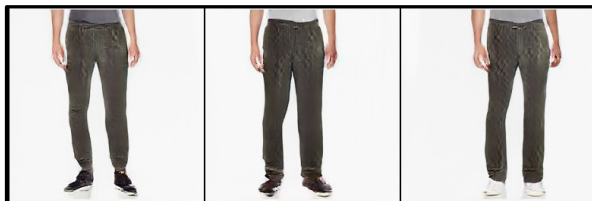


Figure 7. Additional Results Set 4 generated by ReStGAN.